

Brookhaven National Laboratory National Synchrotron Light Source		Number: LS-PPS-0019	Revision: A
		Effective: 4/25/02	Page 1 of 2
Subject: <u>X21A3</u> Laser Interlock Test Procedure			
Prepared/ S. Buda Approved By:	Prepared/ M. Buckley Approved By:	Revision/Periodic Review Log	

*Original Document contains approved signatures.

Test Date:	Test Result: <input type="checkbox"/> Passed <input type="checkbox"/> Failed
Test Reason:	Test Type: <input type="checkbox"/> Full <input type="checkbox"/> Partial
Tester 1:	Assistant 1:
Tester 2:	Assistant 2:

Prepare for test by applying LOTO to the laser source in the U6 hutch. _____

1. Press the start search button located in the hutch.

The light on the button box illuminates. _____

Exit the hutch and close the hutch door.

The "complete search" light illuminates _____

Press the complete search button located on the laser control box.

The "hutch ready" light illuminates. _____

2. Press Start Search. Exit hutch and close door.

The "complete search" light illuminates _____

The "hutch ready" light does not illuminate. _____

Attempt to open laser shutter.

Laser shutter does not open. _____

3. Open the laser shutter

The Open light illuminates when the shutter opens. _____

4. Open the main door to the hutch.

The shutter closes _____

The laser power fault light is out. _____

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- Place a holder on the main door switch, secure the hutch, and press the manual air solenoid actuator.

Place the shutter control switch to the open position

The shutter is open.

Confirm the U6 laser interlock is satisfied.

Have the assistant remove the door switch holder.

There is no more than a 3 second delay before the laser power fault light illuminates.

The shutter remains open.

Observe laser interlock at U6 drops out (reach back), (Diode Laser trips and YVO4-Verdy shutter closes).

Release the solenoid button. Reset the laser power fault.

- Place switch holders (4) on the laser door switches.

Search the hutch and open the shutter.

Remove a holder from the door switch

Door			
1	2	3	4

The interlock drops out

The shutter closes.

Repeat for the remaining three door switches.

- Remove all holders from the laser door switches and test each switch for a distinct click.

- Remove the red tag from the laser source at U6 and return to normal operation.

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